Abstract of the Disclosure

A rotating side case 3b supporting the rotor 3R of an in-wheel motor 3 and a wheel 2 or a hub 4 are interconnected by a flexible coupling 10 which comprises a motor-side plate 11A and a wheel-side plate 11C having a plurality of grooves 11a and a plurality of grooves 11b formed on their opposed surfaces in the circumferential direction at an angle of 45° from the radial direction of the plates and extending in directions orthogonal to each other, respectively, small balls 11m sandwiched between the grooves 11a and 11b in such a manner that they can slide, and an intermediate plate 11B interposed between the above plates 11A and 11C and having guide holes 11s for guiding the small balls in a direction orthogonal to the radial direction of the plates and which has a small number of parts and is easily assembled. even when the motor shaft and the wheel shaft become eccentric with each other, the drive torque of the motor 3 can be transmitted to the wheel 2 without fail, thereby making it possible to improve the assembly work efficiency of the in-wheel motor.